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APPLICATION NO.	F	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,389 01/09/2004		01/09/2004	Kwan-Young Han	16975-002001	9184
23413	7590	11/01/2004		EXAMINER	
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH				ha, nathan w	
BLOOMFIE				ART UNIT	PAPER NUMBER
•				2814	
				DATE MAILED: 11/01/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

				$K_{k}$				
		Application No.	Applicar	it(s)				
		10/754,389	HAN ET	AL.				
	Office Action Summary	Examiner	Art Unit					
		Nathan W. Ha	2814					
- Period fo	- The MAILING DATE of this communication r Reply	appears on the cover	sheet with the correspond	dence address				
THE N - Exten after S - If the - If NO - Failur Any re	DRTENED STATUTORY PERIOD FOR REMAILING DATE OF THIS COMMUNICATION sions of time may be available under the provisions of 37 CFISIX (6) MONTHS from the mailing date of this communication period for reply specified above is less than thirty (30) days, a period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by steply received by the Office later than three months after the modulation of the patent term adjustment. See 37 CFR 1.704(b).	ON. R 1.136(a). In no event, however, a reply within the statutory mining will expire Statute, cause the application to	ver, may a reply be timely filed mum of thirty (30) days will be consi IX (6) MONTHS from the mailing da become ABANDONED (35 U.S.C.	idered timely. ate of this communication. § 133).				
Status								
1)⊠	Responsive to communication(s) filed on $\underline{0}$	1 July 2004.						
2a) <u></u> □	This action is <b>FINAL</b> . 2b)⊠ <sup>3</sup>	This action is non-fina	l.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositio	on of Claims							
5)[ 6)[ <u>\</u> 7)[ <u>\</u>	Claim(s) <u>1-8</u> is/are pending in the application in the above claim(s) is/are with Claim(s) is/are allowed. Claim(s) <u>1,2,6 and 8</u> is/are rejected. Claim(s) <u>3-5 and 7</u> is/are objected to. Claim(s) are subject to restriction are	drawn from considera						
Application	on Papers							
10)	The specification is objected to by the Exan The drawing(s) filed on is/are: a) Applicant may not request that any objection to Replacement drawing sheet(s) including the co The oath or declaration is objected to by the	accepted or b) objethe drawing(s) be held in the drawing (s) be held in the contraction is required if the	n abeyance. See 37 CFR 1 drawing(s) is objected to. S	1.85(a). See 37 CFR 1.121(d).				
Priority u	nder 35 U.S.C. § 119							
a)[2	Acknowledgment is made of a claim for fore All b) Some * c) None of:  1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the priority docum application from the International Bu ee the attached detailed Office action for a	nents have been recei nents have been recei priority documents ha reau (PCT Rule 17.2(	ved. ved in Application No ve been received in this I a)).	<u> </u>				
Attachment	(s)							
1) 🛛 Notice	e of References Cited (PTO-892)		nterview Summary (PTO-413)					
3) 🔲 Inforn	e of Draftsperson's Patent Drawing Review (PTO-948 nation Disclosure Statement(s) (PTO-1449 or PTO/SE · No(s)/Mail Date	<sub>3/08)</sub> 5) <u>⊠</u> I	Paper No(s)/Mail Date Notice of Informal Patent Applic Other:	cation (PTO-152)				

Application/Control Number: 10/754,389

Art Unit: 2814

### **DETAILED ACTION**

## Claim Objections

Claim 7 is objected to because of the following informalities: A period is missing at the end of the claim 7. Appropriate correction is required.

# Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-2, 6, and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al. (US 2004/0070001, hereinafter, Lee.)

In regard to claims 1 and 8, in fig. 1, Lee discloses a chip light emitting diode, LED ([section [0013], line 1) comprising:

a metal pad, or electrode 11 (section [0013], line 3) and a lead, also 11, spaced away from each other on a printed circuit board 1, or base plate (section [0013], line 3); a light emitting chip LED 2 mounted on the metal pad (section [0013], line 2); a wire 3 connecting the light emitting chip and the lead (section [0013], line 4); and

a resin package 4 (section [0013], line 4) sealing the light emitting chip and at least a part of the metal pad, lead, and the wire, the resin package having at least one curved projecting part.

In regard to claim 2, Lee further discloses wherein the curved projecting part has a cross section which is substantially semicircular. See fig. 1, for example.

In regard to claim 6, Lee discloses that wherein the resin package has one projecting part, the curved resin part. See fig.1, for example.

## Allowable Subject Matter

- 3. Claims 3-5 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 4. The following is a statement of reasons for the indication of allowable subject matter:

The primary reason for the indication of the allowability of the above claims is the inclusion therein, in combination as currently claimed, of the limitation of the use of the surface of the resin, the curved projecting part, comprises of straight lines with an angle formed between adjacent lines, or stepped, or striations to scattering light, and the resin package comprises two projecting parts which are spaced away from each other by a predetermined interval. This limitation is found in the above claims and is neither disclosed nor taught by the prior art of record, alone or in combination.

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#### Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan W. Ha whose telephone number is (571) 272-1707. The examiner can normally be reached on M-TH 8:00-7:00(EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nathan Ha

October 21, 2004

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